

REMARKS

Claims 1 and 3-20 are all the claims presently pending in the application. By this Amendment, claim 2 is cancelled without prejudice to or disclaimer of the subject matter recited therein. Claims 1 and 3-16 are amended.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

With respect to the prior art rejections, claims 1 and 7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Engstrom et al (6,639,934). Claims 5 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Engstrom et al, in view of Sollenberger (4,695,969). Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Engstrom et al, in view of Dohi (6,341,224).

These rejections are respectfully traversed in the following discussion.

Claims 2-4, 6, 9-18 and 20 are not rejected over prior art. Accordingly, these claims are understood to be in condition for allowance upon addressing the objection and/or rejections under 35 U.S.C. §112, second paragraph. As the subject matter recited in claim 2 (amended to address any claim objections and/or rejection under 35 §112, second paragraph) is incorporated into independent claim 1, claim 1 and its dependent claims are in condition for allowance.

I. THE CLAIMED INVENTION

The claimed invention is directed to a transmission power control system that includes a base station and a mobile station in communication with said base station, such that at a time of wireless communication between a base station and a mobile station, a transmission power from the base station to the mobile station is controlled to an optimum value by using a desired SIR (desired signal power versus noise power ratio). A desired SIR is preset on the basis of a communication quality of the communication and a

degree of follow-up of a received SIR from the desired SIR. The degree of follow-up of the desired SIR by the received SIR is decided by the absolute value of the difference between the desired SIR and the received SIR.

In times of poor communication quality, conventional systems require excessive power transmission to converge a received SIR with a desired SIR which places an unnecessary strain on line capacity. Conventional systems also put an unnecessary strain on line capacity during periods of good communication quality by reducing a desired SIR due to the superior communication quality.

The claimed invention, on the other hand, provides a transmission power control system that is capable of changing quickly and smoothly in varying environmental conditions without placing excess strain on line capacity.

II. THE 35 USC §112, SECOND PARAGRAPH REJECTION

Claims 1-7 and 9-20 stand rejected under 35 U.S.C. §112, second paragraph. Because the claims are amended in response to this rejection by providing a structural organization of the claimed system, the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. THE PRIOR ART REJECTIONS

A. The 102(e) Engstrom reference rejection

The Examiner alleges that Engstrom teaches the claimed invention. Applicant submits, however, that there are elements of the claimed invention, as amended, that are not disclosed or suggested in Engstrom.

Engstrom discloses a transmission power control system and method for use in a CDMA mobile communications system that uses an estimate of achieved SIR as an additional parameter for the outer power control loop function (Abstract of Engstrom). When the Quality of Service (QoS) and the achieved SIR are both too low, the QoS is ignored and the SIR target value is instead controlled by the achieved SIR. Similarly, when both the QoS and the achieved SIR are too high, the QoS is ignored and the SIR target value is instead controlled by the achieved SIR (col. 2, line 60 – col. 3, line 3).

In rejecting claims 1 and 7, it is alleged that Engstrom discloses that a desired SIR is “preset” on the basis of communication quality and a degree of follow-up of a received SIR from the desired SIR because Engstrom discloses measuring a frame error rate (FER) and adding the FER target value (e.g., QoS target value) to produce a FER error value that is then input to a proposed SIR target adjustment value (see col. 6, lines 24-38). However, as clearly stated in Engstrom, the quality of communication is ignored in controlling the target SIR.

Moreover, Engstrom fails to disclose or suggest “wherein the degree of follow-up of the desired SIR by the received SIR is decided by the absolute value of the difference between the desired SIR and the received SIR.”

Because there are elements of the claimed invention that are not taught or suggested by Engstrom, the Examiner is respectfully requested to withdraw this rejection.

B. The 103(a) Engstrom in view of Sollenberger reference rejection

Claims 5 and 19 are allowable for their dependency on independent claim 1, for the reasons discussed above.

Because the combination of references fails to disclose or suggest the features of claims 5 and 19, including wherein the degree of follow-up of the desired SIR by the received SIR is decided by the absolute value of the difference between the desired SIR and the received SIR, the references do not render the rejected claims obvious.

Moreover, in rejecting dependent claims 5 and 19, the Examiner alleges that Engstrom would have been combined with Sollenberger to form the claimed invention. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention.

To establish a *prima facie* case of obviousness there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Further, the teaching or suggestion to make the claim combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant’s disclosure (MPEP §2143).

Additionally, determination of whether the combination is appropriate is based on first determining whether the reference is “within the field of the inventor’s endeavor” and second, if the reference is outside of that field, whether the reference is “reasonably pertinent to the particular problem with which the inventor was involved.” *In re Deminski* 796 F2d 436, 230 USPQ 313 (Fed. Cir. 1986).

The secondary reference of Sollenberger relates to problems that occur in trying to compensate for time-varying distortions introduced during the propagation of digital data transmissions. Sollenberger discloses that “training periods to adjust tap-weight coefficients” causes difficulties in noisy transmission channels due to improperly set “tap-weight coefficients” and a component due to noise.

As the secondary reference of Sollenberger is not “within the field of the inventor’s endeavor” nor “reasonably pertinent to the particular problem with which the inventor was involved,” there is no motivation or suggestion to combine the references as proposed in the Office Action.

Accordingly, withdrawal of the rejection is respectfully requested.

C. The 103(a) Engstrom in view of Dohi reference rejection

In rejecting claim 8, the Examiner states that Engstrom teaches some of the claim elements, but fails to disclose or suggest whether the measured SIR is a received signal. It is also admitted that Engstrom fails to disclose or suggest a demodulating part as recited in the claim.

To overcome the admitted deficiencies, the Examiner suggests that it would have been obvious to combine Dohi with Engstrom to form the claimed system. Applicant submits, however, that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed method or invention.

The teaching or suggestion to make the claim combination, and the reasonable expectation of success, must both be found in the prior art, and not based on Applicant’s disclosure (MPEP §2143). Using the specification of the Applicant as a “road map” to combine elements of various references is an impermissible use of hindsight.

Even if combined, the combination of references fails to disclose or suggest each and feature recited in the rejected claim. For example, the combination of references fails to disclose or suggest the desired SIR control part reads, a desired communication quality value from the demodulating part, the desired communication quality value from the communication quality measuring part, a measured SIR value from the SIR measuring part from a memory, and the measured SIR value from the SIR measuring part, as recited in the amended claim.

Accordingly, withdrawal of the rejection is respectfully requested.

IV. FORMAL MATTERS AND CONCLUSION

A. Drawings

In response to Examiner's objections to the Drawings, Applicant files herewith replacement sheets for Figures 5 and 6, labeling the figures as "Related Art." Figs. 5 and 6 are also amended to correct a typographical error, i.e., changing "'DOSE" to "DOES."

B. Claim Objections

In response to Examiner's objections, the claims are amended in a manner believed fully responsive to all points raised by the Examiner.

C. Specification

Although not objected to, the abstract of the specification is amended to better comport with U.S. patent practice.

D. Information Disclosure Statement

Applicant respectfully requests acknowledgment of receipt and consideration of the references submitted to the USPTO in an Information Disclosure Statement filed on June 7, 2006.

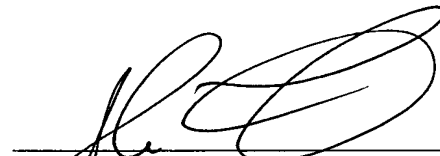
E. Conclusion

In view of the foregoing, Applicant submits that the pending claims are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview. The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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